



Small Unmanned Aerial System (SUAS)



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POI BRIEF



Training the Soldiers and future Leaders of the Army!



Agenda



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- **Training Mission Statement**
 - ATTRS Mission
- **Historical Overview and Stats**
- **Recommendation/Glide Path**
- **POI administrative data**
- **POI Training Calendar Review**
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- **POI Initiatives / changes under development**
- **Integration of New Training Methods**
 - ALC 2015
 - 21st Century Leader Development
 - Combat Realistic Training
- **Challenges / Issues**



Mission Statement (ATTRRS)



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- **SUAS OPERATOR:** The purpose of this course is to train and certify personnel to operate and perform organizational level maintenance tasks on the Raven Small Unmanned Aircraft Vehicle System.
- **SUAS MASTER TRAINER:** To qualify selected SUAS Raven Operators capable of teaching and evaluating academic and flight instruction on the SUAS Raven. The selected Operator will learn the "Fundamentals of Instruction", how to manage an Aircrew Training Program (ATP), and employ UAS accident prevention. This course also serves as an introduction to the One Station Remote Video Terminal (OSRVT).

ATTRS MISSION- OPERATOR

FY 12 LOAD: 18 Resident Courses and 20 MTT (456)

FY 13 LOAD: 17 Resident and 14 MTT (372)

FY 14 LOAD: Transition to NEW MT V2

ATTRS MISSION- MASTER TRAINER

FY 12 LOAD: 7 Resident Courses and 5 MTT (96)

FY 13 LOAD: 3 Resident and 4 MTT (56)

FY 14 LOAD: Transition to NEW MT V2



Historical Overview



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Total Number of Operators Trained		Total Number of Master Trainers Trained	
FY04-FY10	FY11	FY07-FY10	FY11
2855	379	215	85
TOTAL: 3234 Operators		TOTAL: 300 Master Trainers	

- **1500-3000 annual operator training requirement (12-18 month average utilization/operator iso ARFORGEN)**
- **300 annual MT training requirement (24 month avg utilization) 2358 system requirement**
- **4716 operators required Army wide (Crew Served – 2 operators/sys)**
- **1013 Master Trainers required Army wide (1/BCT; 1/BN; 1/sep Co's)**



Mission Statement (MT V2)



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To qualify selected SUAS Operators as Master Trainers capable of conducting Initial Qualification Training (IQT) and Certification of new Operators. The select individual will learn how to manage an Aircrew Training Program (ATP), assist the Commander to evaluate academic instruction, flight instruction and manage SUAS accident prevention. Duties will also include maintaining a sufficient number of operators within the unit and updating the Small Unmanned Aircraft System Manager (SUASMAN) tracking program.



RECOMMENDATION



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- Transition FY13 to new SUAS Master Trainer Course
- Eliminate SUAS Operator/Master Trainer courses as of FY13
- Conduct 1 resident, 2 MTT Master Trainer V2 Courses monthly beginning FY13

Current Course Load FY 12:

- SUAS Operator Courses Resident/MTT in ATRRS- 29 Projected yield: **348 operators**
- SUAS Master Trainer Courses Resident/MTT- 7 Projected yield: **56 master trainers**
- Does not include TRAP Courses (Historically another 18-21 Master Trainer and Operator Courses)

FY	XT AUTH MT	XT AUTH OP	Total		LOAD-MT	LOAD-OP	
11	3	6	9		89	320	
12	3	7	10		89	360	
13	2	7	9		56	368	

Recommended Course Load FY 13:

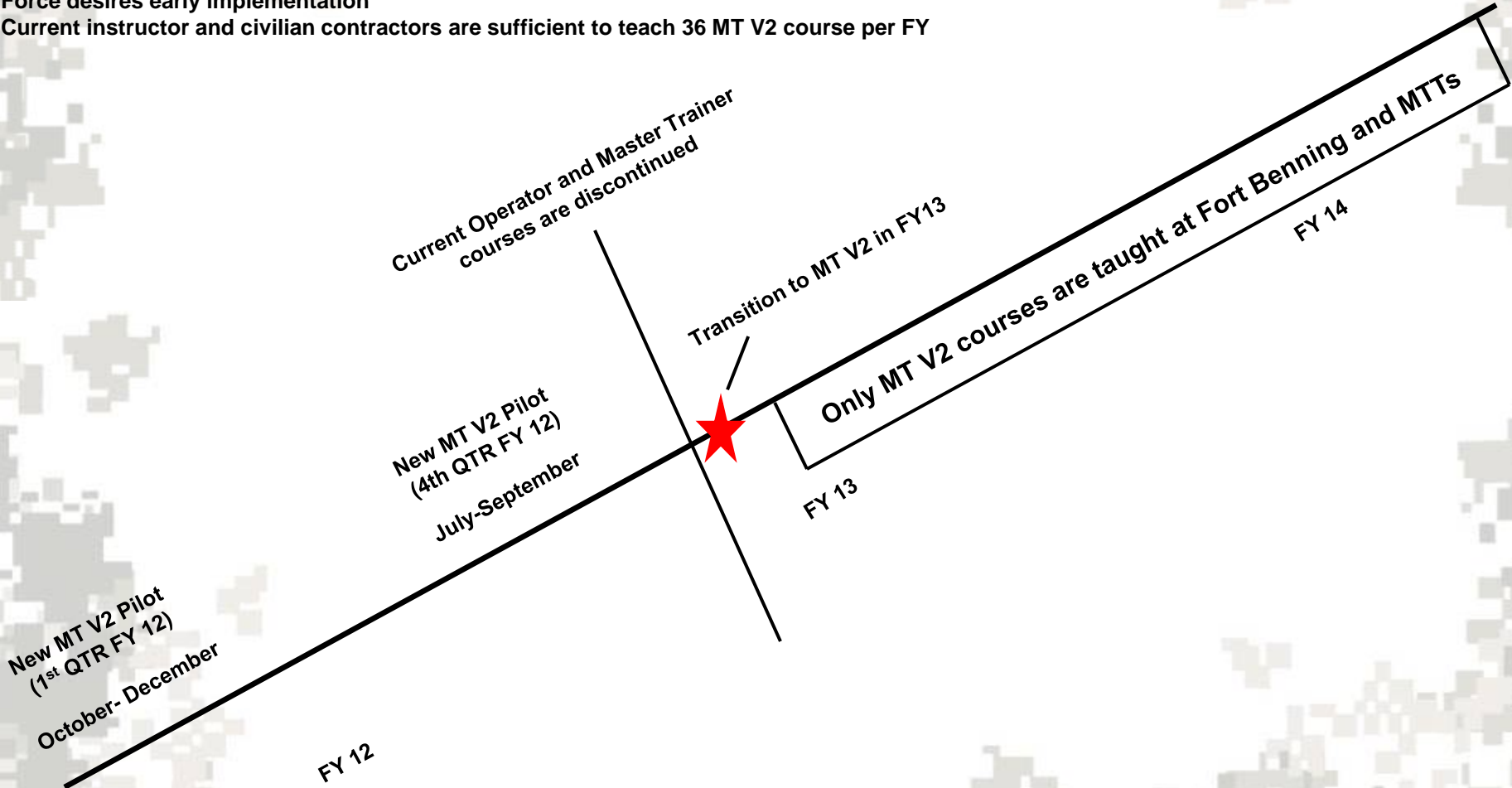
- SUAS Master Trainer (V2) Courses resident/mtt-36 Projected yield: **432 master trainers**

These 432 Master Trainers would then be able to certify operators at BCT level and below. This course of action would allow the Max output of instructors by making all operator training at home station.

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Facts:

- POI is approved
- Force desires early implementation
- Current instructor and civilian contractors are sufficient to teach 36 MT V2 course per FY





POI Administrative Data



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- **Number of Courses Taught a Year**
 - 18 Resident, 20 MTT for FY12 (OPERATOR) **TOTAL 38**
 - 7 Resident, 5 MTT for FY 12 (MASTER TRAINER) **TOTAL 12**
- **Length of Course:** 1 Week (Master Trainer) 2 Weeks (Operator)
- **Student Loads**
 - **Rank Requirements** (All) Operator (E5 and above) Master Trainer ←-----waiverable to e-4 and below pending 0-5 approval
 - **MOS Requirements** (All)
 - **Min:** 6 (Master Trainer) 6 (Operator)
 - **Max:** 8 (Master Trainer) 12 (Operator)
 - **Optimal:** 8 (Master Trainer) 12 (Operator)
- **Number of Instructors** (13 Military and 11 Civilian Contractors)
 - **Instructor to Student Ratio** (Anywhere from 1:1 to 1:12)
 - **Key Leaders**
 - **OIC:** CPT Downs
 - **NCOIC:** SFC Weaver
 - **Master Trainer:** SSG Peek
- **Graduation Rate:** greater than 85%



POI Training Calendar Review



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Master Trainer V2

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Day 1 PE: Test 1 Classroom: In processing Fundamentals of Instruction ATP Overview Class Assignment	Day 2 Fundamentals of Instruction Airspace Management Emergency Procedures Class Assignment	Day 3 RPUAV Toolbar for Falconview Flight Simulator/Vampire Advance Maintenance/ Troubleshooting	Day 4 Incident Reporting Operate Range and Bearing Tool Assembly /Disassembly Post flight/Pre Flight Course Review Homework	Day 5 EXAM Flight Procedures Advance/Basic Launch Training Flight profile 2-1(Waypoint Reroute/ Target Acquisition)	Day 6 Training if required due to weather
Day 8 Risk Management/ Safety Mission Planning/Crew Mission Brief Class Assignment Homework	Day 9 Flight Profile 2-3(Man/Alt Covert Approaches) OSRVT Flight Profile 2-2(Basic Mission)	Day 10 •Flight Profile 2-2(Basic Mission)	Day 11 Flight Profile 3-1 /3-2 (Low Levels/ Handoff s) OSRVT PE Course Review	Day 12 Flight Profile 3-1/3-2 Exam OSRVT Class Homework Master Trainer Flight Profile	Day 13 Training if required due to weather
Day 15 ATP Packet Master Trainer Flight Profile 2 Night Operations Flight profile 3-4(Night Flight) OSRVT PE<<Remove	Day 16 Mobile Operations Flight Profile 3-3 (Mobile Operations) SUASMAN Assignment OSRVT PE	Day 17 Master Trainer Flight Profile 3 Class Assignment ATP SUASMAN Assignment OSRVT PE	Day 18 Class Assignment ATP Course Review SUASMAN Assignment ATP Exam	Day 19 ATP Exam Retest Out processing Gradation	Day 20 Training if required due to weather



POI Training Calendar Review



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Master Trainer V1

Monday	Tuesday	Wednesday	Thursday	Friday
Day 1 • Classroom Instruction: SUAS Range and Bearing tool, Fundamentals of Inst., Conduct Air Crew Training Program, SUAS Safety and Risk Management, Incident and Reporting, Emergency Procedures,	Day 2 • Classroom Instruction: Maintenance and Troubleshooting, SUAS simulator, Advanced FLT, Controls and Indicators, Falcon view, Basic Mission, Raven FLT Log, Airspace Management,	Day 3 • PE: Flight Profile 1	Day 4 • PE: Flight Profile 2 • PE: Test 1 •Classroom: OSRVT	Day 5 • PE: Flight Profile 3 • PE: Retest 1 • PE: OSRVT • Out-Process •Graduation



POI Training Calendar Review



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Operator

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Course Intro	INS show and prep	INS show and prep	Basic Mission	INS show and prep	Make-Up Flights and Training if needed
Manual, Flight log	Trans to Range	Falcon view	Homework	Trans to Range	
System Description	Site set up Launch TNG1-1	Trans to Range	Simulator	Flight Profile 3-1	
Basic Flight	Trans to Classroom	Flight Profile 2-1	Mobile OP'S	Trans to Classroom	
Lunch	Lunch	Down load	NIGHT op's	Test 1	
Controls and Indicators	Sim		Advanced Aero	Down load	
Ass, Dis and Preflight	Mapping and Gps		Incident Reports		
Maint and trouble shooting	Range and bearing		Untrained ASST		
EP'S	Airspace Mgt		Hand Offs		
	EP Quiz				
Day 8	Day 9	Day 10	Day 11	Day 12	
INS show and prep	INS show and prep	INS show and prep	INS show and prep		
Trans to Range	Trans to Range	Trans to Range	Trans to Range	Clean up, Inventory	
Flight Profile 2-3	Flight Profile 3-2/3-3	Flight Profile 3-4/3-5	Flight Profile 2-2	Graduation	
Trans to Classroom	Trans to Classroom	Trans to Classroom	Trans to Classroom	Test 2 Retest	
Down load	Down load	Down load	Down load		
Test 1 Retest			Test 2		



POI Changes Submitted / Awaiting Approval



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- 19 April 2011 the new Master Trainer POI was approved for implementation in FY14
- EXORD was published stating early implementation of MT V2 in FY12
- Numerous conferences have taken place at CONUS locations to solve the puzzle of how we implement this course early (FY13).
- Waiting on the approval memo from TOMA for early implementation. Aviation Center of Excellence initiated this memo and sent through G3 at MCoE for concurrence.
- If new Master Trainer course begins in FY13 will require relief of current course load in ATRRS.



POI Initiative / Change Under Development



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- Incorporating SUAS Raven flights and capabilities into the MCCC and other leaders courses
- Expand current POI to bring in PUMA systems.
- One Common Controller is being developed for use with ground and air robotic systems.



Integration of New Training Methods



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•ALC 2015

SUASMAN allows for tracking of SUAS operators and online learning through different distant learning modules. Using the VAMPIRE simulator for “stick time” throughout classes.

•21st Century Leader Development

Create advanced scenarios for students that require them to use snap decision making skills and become adaptive to the ever changing battlefield environment

•Realistic Training / Critical Thinking / Problem Solving Techniques

Would like to integrate SUAS capabilities to new Officers during their training in IOBC on how and what to observe, let them choose and build from their experiences so they are more effective PLs.



Challenges / Issues



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- **New MT V2:** Are we beginning this course in FY13 or FY14

- **Resource Issues:**

- 1.) Long Term- Contractors have been funded only until May 12, will 100% need them for implementation of the new MTv2.

- 2.) Need extra systems before we transition to MT V2, working with PM shop!

- **Manning Issues:** Would like to see some form of stability in our instructors implemented. When new instructors arrive it is at least a 90-120 day turn around before they can instruct. **The SUAS Schoolhouse is losing 7 instructors prior to Jan 12.**